

*Cupertino, Mountain View, Palo Alto, South San Jose,
Santa Clara, and Sunnyvale*

November 19 – 21, 2013



SOUTH BAY SITES SUMMARY

Background

- Groundwater underneath and near the South Bay Sites is contaminated with volatile organic compounds (VOCs), primarily trichloroethene or TCE. Several plumes of contaminated groundwater are co-mingled in offsite areas. This contamination is thought to be caused by accidental releases from operations many years ago, before such regulations to prevent such occurrences were in place.
- Because public utilities supply water from distant sources to consumers, no one is drinking this water or coming into direct contact with it.
- However, the goal is to clean up the groundwater so that it meets drinking water standards, as it is considered a valuable resource and potential drinking water source.
- Though no one is drinking the contaminated water, there is a potential for vapors from TCE and other solvents in the water to come up through the soil and accumulate in overlying buildings (a process called “vapor intrusion”).
- EPA Region 9 is assisting the San Francisco Bay Regional Water Quality Control Board by overseeing the vapor intrusion investigations.

Hot Issues

- EPA Region 9 continues a very active sampling and monitoring program, together with extensive community outreach, for the vapor intrusion investigations in the South Bay.
- However, many of the Responsible Parties (RPs) for the South Bay Sites are frustrated by the absence of final regional or national guidance on TCE toxicity and short-term action levels and vapor intrusion investigation requirements.
- Consistent with our primary mission to protect public health, the Region will follow the evolving science for risks from TCE and the most recent research on the vapor intrusion pathway in formulating our recommendations to the State of California and RPs.
- This is an issue that has ramifications for sites elsewhere in California and the rest of the U.S., and the Agency will be consistent in how it addresses this issue by relying on the science.



SOUTH BAY SITES AT A GLANCE

Site Name	Background	Vapor Intrusion Status
AMD 901/902 TRW Microwave Phillips (RCRA Site) Off-Site Operable Unit Combined Superfund Sites (Sunnyvale)	Co-mingled TCE groundwater plume & vapor intrusion. Remedy change from groundwater pump-and-treat to in-situ bioremediation & VI solutions.	Some limited studies in nearby schools found vapor intrusion occurring. Additional VI investigations needed in downgradient neighborhoods.
AMD 915 DeGuigne Drive (Sunnyvale)	Co-mingled TCE & cis-DCE groundwater plume & vapor intrusion. Groundwater pump-and-treat & potential VI solutions.	VI investigations needed in downgradient neighborhoods.
AMD 1165/1175 Arques Ave also called Monolithic Memories (Sunnyvale)	Various solvents in soil/groundwater & vapor intrusion. Groundwater pump-and-treat, soil excavation, soil vapor treatment, and vapor intrusion mitigation.	Vapor intrusion found to be occurring in commercial buildings located over former source areas. Additional VI investigations needed in downgradient neighborhoods.
Fairchild Semiconductor (South San Jose)	Various solvents in groundwater & potential vapor intrusion. Deep underground slurry wall, monitored natural attenuation & potential VI solutions.	Vapor intrusion evaluation needed.
Hewlett Packard 620-640 Page Mill Road (Palo Alto)	TCE in groundwater & vapor intrusion. Groundwater pump-and-treat & potential VI solutions.	Initial residential sampling found vapor intrusion occurring in pathway samples in an apartment complex, but not into apartments. Additional vapor intrusion evaluations needed.
Intersil/Siemens (Sunnyvale & Cupertino)	TCE in groundwater & vapor intrusion. Groundwater pump-and-treat &	Initial residential sampling found evidence of vapor intrusion occurring in one residence, however resident

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	potential VI solutions.	declined further testing or mitigation. Additional vapor intrusion evaluations needed.
National Semiconductor (Sunnyvale)	Solvents in groundwater & vapor intrusion. Groundwater pump-and-treat & VI solutions.	Initial sampling found vapor intrusion occurring in commercial buildings. Mitigation on-going. Additional vapor intrusion investigations needed.
Synertek Building 1 (Santa Clara)	Solvents in groundwater & vapor intrusion. Groundwater pump-and-treat & potential VI solutions.	Additional vapor intrusion evaluations needed.
Teledyne Semiconductor / Spectra-Physics (Mountain View)	TCE in groundwater & vapor intrusion. Groundwater pump-and-treat, bioremediation & VI solutions.	Initial sampling found vapor intrusion to be occurring into some residences & commercial buildings. Mitigation ongoing. Additional vapor intrusion evaluations needed.